

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENT AVAILABILITY

(Chapter II of the Patent Cooperation Treaty)

REC'D 23 FEB 2006  
PCT

#### (PCT Article 36 and Rule 70)

Applicant's or agent's file reference DIAM-001-PCT	<b>FOR FURTHER ACTION</b> See Form PCT/PEA/416	
International application No. PCT/EP 03/12334	International filing date (day/month/year) 05.11.2003	Priority date (day/month/year) 05.11.2003
International Patent Classification (IPC) or national classification and IPC A44C17/00		
Applicant DIAMSCAN N.V. et al.		
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 4 sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> ( <i>sent to the applicant and to the International Bureau</i> ) a total of 3 sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> ( <i>sent to the International Bureau only</i> ) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).		
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application		
Date of submission of the demand 27.05.2005	Date of completion of this report 21.02.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Horubala, T Telephone No. +49 89 2399-7288	



# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/EP 03/12334

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4)
    - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

### Description, Pages

2-19 as originally filed  
1 received on 17.01.2006 with letter of 17.01.2006

### Claims, Numbers

1-9 received on 01.02.2006 with letter of 01.02.2006

### Drawings, Sheets

1/3-3/3 as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

- The amendments have resulted in the cancellation of:
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):
- This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/EP 03/12334

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	1-9
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.  
**PCT/EP 03/12334**

1. Document US 5 637 244 A (D1), which is considered to represent the most relevant state of the art concerning independent claims 1 and 3, discloses a device for creating a three dimensional image inside a transparent or translucent material. Second document US 2002/018255 A (D2), being the most relevant for independent claim 2, discloses an optical system for creating holographic stereograms.
2. Claim 1 of the present invention defines a kit for visualising a cutting regime of a rough diamond, the kit comprising a solid translucent substance into which three dimensional images are marked, said marking indicating:  
the outer surface of the original rough diamond,  
the internal defects (if present),  
the outer surface of one or more cut diamonds.  
Further, the kit comprises solid, physical representations of one or more diamonds indicated by the markings and/or solid, physical representation of the rough diamond, and/or one or more actual cut diamonds indicated by the markings.  
Claim 2 of the present invention defines an analogous kit, but comprising a hologram depicting markings which visualise the items listed in claim 1, see above.  
Claim 3 defines a device for visualising a cutting regime of a rough diamond.
3. The technical problem which underlies the present invention is to provide a device and a kit which reduces the difficulties encountered when trying to decide the optimal cutting regime of a rough diamond when inspecting it on his own. The kits according to claims 1 and 2, as well as the device according to claim 3 of the present invention enable to optimise the process.
4. There is no suggestions nor hints in the prior art documents which would prompt the skilled person to this solution.  
Dependent claims 4-9 concern preferred embodiments of the invention according to claims 1 and 2.  
The requirements of the PCT are met.